

ABSTRACT

A lens assembly includes, in order from an object side to an image side: a first lens; a first meniscus lens in optical communication with the first lens; a second meniscus lens in optical communication with the first meniscus lens; an aperture stop in optical communication with the second meniscus lens; a fourth lens in optical communication with the aperture stop; and a bi-convex lens in optical communication with the fourth lens. The lens assembly is a four group, five element, lens assembly that is constructed so that at least one of the lenses may be replaced without also requiring the other lenses in the assembly to be significantly changed, resulting in a “flexible” construction. The lens assembly may be adapted to provide a field of view of approximately 15 degrees; approximately 0% vignetting within the field of view; and a distortion of the image of less than approximately 1%. Multiple lens assemblies and detectors may be provided in a single housing.